DV-HD-QUAD

DIGITAL SD TO HD-SDI CONVERTER

User's Manual

Precaution and Safety Guidelines

Please read this user's manual thoroughly prior to use the unit for its easy and convenient use.

- Do not install the product in the following places: extremely low or high temperature conditions; places exposed to rain, snow, or high humidity; places containing or exposed to oil and gas; places exposed to vibration and shock; places under direct sunlight or exposed to outdoor weather conditions; places exposed to radio waves (RF) or near to power lines. It may cause low performance or malfunction of the unit.
- Do not disassemble the product or insert foreign objects.
- The unit is subject to electric shock hazard. Be careful not to get an electric shock while using the device.
- Please use only electrical safety approved power supply unit (power adapter) over 12V DC /0.2A with electromagnetic compatibility.
- Do not use and/or connect any devices inappropriate to the unit. It may cause malfunction of the unit or fire.
- Use this product under temperature conditions only between 0°C and +50°C.
- Should be careful not to have the lines changed when connecting them.
- Prior to turn on the device, check the cable insulation condition of the data cable, connected with external devices.
- Before installing the product, check its voltage rate and then turn on the power.
- Make sure to turn off the product prior to installation.
- Do not subject the product to physical shock or exert excessive force to operate the product.
- Do not use the device when any smoke or smell is produced from the unit. It may be subject to fire or electric shock. If any smoke or smell is produced, please turn off the unit and remove the power cable immediately, and contact your distributor to check the device properly.
- If the power does not turn ON, please check whether the power cable is connected correctly or not.
- If the device does not work properly, please contact your distributor.

1. Introduction

1-1. Overview

The DV-HD-QUAD, Digital Converter, receives analogue video signals from 4 analogue cameras and converts SD signals to HD-SDI signal and outputs to 1 HD-SDI signal after up-scaling the resolution which the customer wants to choose. Installer can choose to display the screen in full screen mode from 1~4 channels or quad screen mode for 4 channels

1-2. Features

- Converting 4 SD signals to 1 HD-SDI signal by up-scaling 4 SD signals
- Transmitting 4 split screen over 1 coaxial cable (HD-SDI output).
- Possible to transmit up to 150m(RG-6) when setting output resolution as a 1920x1080, 60i.
- Possible to extend the transmission distance by using HD SDI - repeater.
- Possible to set the Video Output Resolution. (1920x1080i 60, 1920x1080 60p)
- Support OSD (Channel Number, Title)
- Easy installation and various applications

1-3 Applications

- When it is necessary to use analogue cameras in HD-SDI System (Hybrid solution)
- When it is necessary to install cameras (1~4 cameras) at the same location such as a crossroad and parking lot
- Where a centralized supervisory and control system is needed such as the control center at Subway, Airport, Port and etc.
- At a control center of large buildings and express way and etc.

2. Components

	Adapter	User's Manual

3. Product Parts and Peripheral Device Connection

① **CVBS IN:** Connect to the analogue camera or CVBS video signal

② **HD-SDI OUT:** Connect to the HD monitor or other equipment which is possible to input SDI signal.

③ **MENU / SET KEY:** Press this button for 3 seconds in order to enter the SETUP MENU mode. Possible to control set point in the SETUP MENU by using UP, DOWN, SET function.

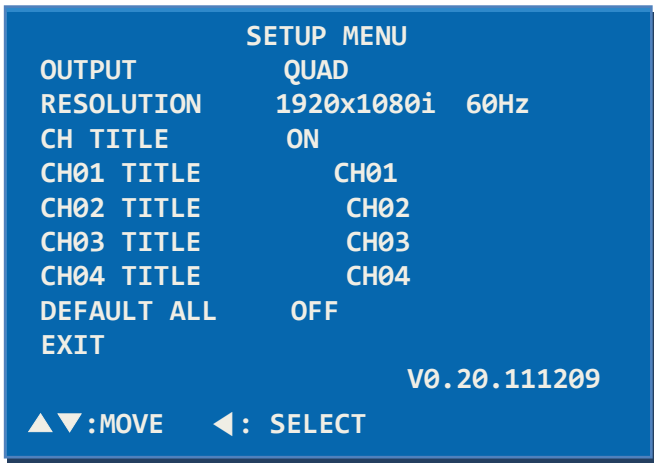
④ **POWER LED:** LED ON when power is on

⑤ **POWER INPUT:** DC 12V Input

4. SETUP MENU (Setting the MENU)

- Enter the SETUP MENU: Press the SET button on the right side of the product. Then SETUP MENU screen is displayed.

4-1 START-UP SCREEN



- How to use the MENU Screen Button: Press the SELECT(◀)button in order to choose the menu by using MOVE(▲▼) buttons. Press SELECT(◀) button in order to return to the MAIN MENU.

4-1-1. OUTPUT
: Set channel screen mode (full screen, Quad)
SETUP MENU > Press SELECT(◄) Button in OUTPUT Menu, using MOVE(▲▼) Buttons > Press the button to set the input mode amongst 1CH↔2CH↔3CH↔4CH↔QUAD by moving MOVE(▲▼) Buttons.

4-1-2. RESOLUTION
: Set the resolution of the outputted HD-SDI signal
SETUP MENU > Press SELECT(◄) Button in RESOLUTION Menu, using MOVE(▲▼) Buttons > Press the button to set the output mode amongst 1920*1080i60↔ 1920*1080p60 by moving MOVE(▲▼) Buttons.

4-1-3. CH TITLE
: Set to display or not display the name of the channels on the monitor.
SETUP MENU > Press SELECT(◄) Button in CH TITLE Menu, using MOVE(▲▼) Buttons > Press the button to turn on/off the monitor display mode between ON and OFF.

4-1-4. TITLE
: Modify the letter of the Channel title. (Max. 8 Characters)
SETUP MENU > Press SELECT(◄) Button in CH TITLE Menu, using MOVE(▲▼) Buttons > Press the button to set the name, using 8 characters by moving MOVE(▲▼) Buttons.

4-1-5. DEFAULT ALL
: Reset to the default value.
SETUP MENU > Press SELECT(◄) Button in DEFAULT ALL Menu, using MOVE(▲▼) Buttons > Press the button to set the default value between ON and OFF.

4-1-6. EXIT
: Exit from SETUP MENU
SETUP MENU > Press SELECT(◄) Button in EXIT Menu to exit from SETUP MENU, using MOVE(▲▼) Buttons

5. Connection Diagrams